

بنك الاسئلة

الصف
السادس
الابتدائي
٢٠٢٤

التميز

أ/ محمود سعيد



ELMotamyez Questions Bank

Math

Final Revision

٨٢

MR. Mahmoud Elkhoully



6
الصف
السادس

نسخة
مجانية

ملحق الإجابات
بالداخل



El.Motamyez.School

يمكنكم الحصول على المذكرات والاختبارات من خلال مسح رمز ال QR Code
أو من خلال صفحة "التميز - أ/ محمود سعيد".
يرجى مراعاة حقوق صاحب المحتوى عند النشر.



First term Questions Bank



Question 01

Choose the correct answer

- 1 Take away double the number m from 20 is written as
 - a $20 - m$
 - b $m - 20$
 - c $2m - 20$
 - d $20 - 2m$
- 2 The volume of the cube of edge length 4 cm is cm^3
 - a 12×4
 - b $4 + 4 + 4$
 - c 4^3
 - d 3^4
- 3 $3 \times 3 \times 3 \times 3 \times 3 = \dots\dots\dots$
 - a 3×5
 - b $3 + 3 + 3 + 3 + 3$
 - c 3^5
 - d 5^3
- 4 $3 + 3 + 3 + 3 + 3 = \dots\dots\dots$
 - a 3×5
 - b $3 \times 3 \times 3 \times 3 \times 3$
 - c 3^5
 - d 5^3
- 5 The value of the expression $5m \div 3$ for $m = 6$ is
 - a 3
 - b 5
 - c 6
 - d 10
- 6 The first operation you perform in the expression $6 + (5^3 - 4) \div 2$ is
 - a add
 - b Subtract
 - c exponent
 - d Divide
- 7 The first operation you perform in the expression $6 + 5^3 - (4 \div 2)$ is
 - a add
 - b Subtract
 - c exponent
 - d Divide
- 9 Seven cubed added to six squared equals
 - a $7 \times 3 + 6 \times 2$
 - b $6^2 + 7^3$
 - c $6^2 - 7^3$
 - d $2^6 + 3^7$
- 10 Rozana saved x pounds . Mr Mahmoud Elkholy gave her 20 pounds , then she havepounds now .
 - a $x - 20$
 - b 45
 - c $x + 20$
 - d $20x$
- 11 If $x + 5 = 8$, then $3x = \dots\dots\dots$
 - a 3
 - b 5
 - c 9
 - d 15
- 12 A number if added to 5 the result is 17 , then the number is
 - a 12
 - b 22
 - c 5
 - d 17
- 13is a solution of the inequality $d > 15$
 - a 15
 - b 12
 - c 20
 - d All of them



- 14is a solution of the inequality $d \geq 15$
 (a) 15 (b) 16 (c) 20 (d) All of them
- 15 The mode of 7, 9, 7, 8, 7, 6, 7 and 10 is.....
 (a) 7 (b) 8 (c) 9 (d) 10
- 16 All the dot plots have the following characteristics except
 (a) dot plot should have titles (b) dot plots should have data graphed above a number line
 (c) the number lines in dot plots should start at 0 (d) each individual piece of data can be seen on a dot plot and is represented by a dot.
- 17 A has two axes, horizontal and vertical.
 (a) bar graph (b) histogram (c) double bar graph (d) all of them
- 18 The question : what are the students favourite colours? Is a..... question
 (a) statistical (b) non-statistical (c) numerical data (d) All of them
- 19 The range = the greatest value..... the smallest values.
 (a) + (b) - (c) \div (d) \times
- 20 The best subset for the number 5 is
 (a) Counting numbers (b) Rational numbers (c) Integers (d) natural numbers
- 21 The best subset for the number 5.2 is
 (a) Counting numbers (b) Rational numbers (c) Integers (d) natural numbers
- 22 The Set of counting numbers The set of rational numbers
 (a) Belong (b) not belong (c) subset (d) Not subset
- 23 The Set of integers The set of natural numbers
 (a) Belong (b) not belong (c) subset (d) Not subset
- 24 -5 The set of rational numbers
 (a) Belong (b) not belong (c) subset (d) Not subset
- 25 r is 9 times p added to twice m in the equation is.....
 (a) $r = 9p + m$ (b) $r = 2m + 9p$ (c) $9r = p + 2m$ (d) $r + m = 9p$



- 26 In the equation : $y = x + 1$, if the output is 1, then the input is....
 (a) 1 (b) 3 (c) 2 (d) 0
- 27 The order pair which satisfies the rule : $y = 3x + 1$ is.....
 (a) (0, 0) (b) (0, 4) (c) (-1, 1) (d) (1, 4)
- 28 which of the following data set hasn't any outlier?
 (a) 103,104,105,103,102,17 (b) 24,25,26,21,22,23,204
 (c) 300, 309,302,303,305,306,308 (d) 4,211,212,213,214,215,1000
- 29 Youssef eat at least 3 oranges , then Youssef may eatoranges
 (a) 3 (b) 5 (c) 12 (d) All of them
- 30 Layan has 25 pounds and Maya has more money than Layan , then Maya may haspounds .
 (a) 25 (b) 20 (c) 100 (d) All of them
- 31 Zyad has 16 candies and Kareem has less candies than Zyad , then Kareem may hascandies .
 (a) 100 (b) 16 (c) 10 (d) All of them
- 32 Jana bought 6 SPIRO SPATHIS and Mohamed bought same number or more ,then Mohamed may bought SPIRO SPATHIS .
 (a) 6 (b) 12 (c) 100 (d) All of them
- 33 All of the following are solutions of inequality $x \leq -8$ except
 (a) -8 (b) -10 (c) -7 (d) All of them
- 34 In the equation : $5x + 2 = y$, the independent variable is
 (a) 5 (b) 2 (c) x (d) y
- 35 In the equation : $b = \frac{1}{2}f + 3$, the dependent variable is
 (a) 5 (b) 2 (c) f (d) b
- 36 The GCF of any two different prime numbers is
 (a) 0 (b) 1 (c) itself (d) The smallest number
- 37 $\frac{3}{6} + \frac{1}{2} = \dots\dots\dots$
 (a) $\frac{1}{2}$ (b) $\frac{3}{6}$ (c) 1 (d) $\frac{4}{8}$
- 38 Which of the following is an equation ?
 (a) $3n + 7$ (b) 7 times the number h (c) $3c = 3$ (d) $6e - 7$



- 39 (2, m) satisfies the rule $y = 3x - 2$, then $m =$
- a 1 b 2 c 3 d 4
- 40 In the equation : $y = 2x + 10$, the ordered pair (3, n) satisfies the equation, then $n =$
- a 2 b 10 c 16 d 30
- 41 "Y is 6 times h added to 12" in equation is
- a $12 = y + 6h$ b $Y = 12h + 6$ c $H = 6y + 12$ d $Y = 6h + 12$
- 42 (.....,) is called the origin .
- a (1, 1) b (0, 1) c (0, 0) d (1, 0)
- 43 The greatest negative integer is
- a 1 b -1 c 0 d -1000,000
- 44 $\frac{3}{7} + \frac{2}{5} =$
- a $\frac{5}{12}$ b $\frac{29}{35}$ c $\frac{1}{2}$ d 1
- 47 $3(5 + 4) = (3 \times \dots) + (\dots \times 4)$
- a 5, 3 b 5, 4 c 3, 5 d 3, 4
- 48 In the equation the : $y = 2x + 3$, the ordered pair (2, a) satisfies the equation then, $a =$
- a 5 b 8 c 7 d 9
- 49 The median of the value 4, 7, 8, 1 and 3 is
- a 3 b 1 c 4 d 7
- 50 The median of $B + 1$, $B + 2$, $B + 3$ is 10, then $B =$
- a 1 b 3 c 2 d 8
- 51 If the upper quartile of the values : $m + 1$, $m + 2$, $m + 3$, $m + 4$, $k + 5$, where m is a positive integer is 16.5, then $m =$
- a 7 b 8 c 12 d 10
- 52 All the following are numerical data except.....
- a names b ages c length d temperatures
- 53 The opposite of the number 15 is
- a 15 b |15| c -15 d |-15|
- 54 The additive inverse of $|-4|$ is
- a 4 b |4| c -4 d |-4|



- 55 In the equation : $x = 5y + 3$, the dependent variable is.....
 (a) $5y$ (b) x (c) y (d) 3
- 56 In the equation : $4a + 24 = b$, the independent variable is.....
 (a) a (b) b (c) 24 (d) $4a$
- 57 "k equals the product of m and 4" in equation is.....
 (a) $k = 4m$ (b) $k = 4 + m$ (c) $m = 4k$ (d) $m = k + 4$
- 58 which of the following is an equation?
 (a) $20x + 53.2$ (b) $2 + m$ (c) $Y > 12$ (d) $5x = 20$
- 59 "30 less than f equals y" in the equation is.....
 (a) $30 - f = y$ (b) $30 + f = y$ (c) $F - 30 = y$ (d) $Y - 30 = f$
- 60 If $(4, \dots)$ satisfies the rule $y = \frac{1}{2}x + 2$
 (a) 4 (b) 10 (c) 6 (d) 2
- 61 $\frac{9}{2}$ The set of natural numbers
 (a) Belong (b) Does not belong (c) subset (d) Not subset
- 62 is categorical data.
 (a) age (b) phone number (c) weight (d) favourite TV show
- 63 is numerical data
 (a) nationality (b) Place of birth (c) Exam degree (d) name
- 64 The LCM of any two different prime numbers is
 (a) 1 (b) The product of them (c) The smallest number (d) The greatest number
- 65 The dividend in $321 \div 12 = 26 \text{ R}9$ is
 (a) 321 (b) 12 (c) 26 (d) 9
- 66 is the better measure of centre for data set with outlier values.
 (a) Median (b) Range (c) Mode (d) mean
- 67 Which of the following is nearest to zero ?
 (a) 5 (b) -1 (c) -3 (d) 3
- 68 The best subset for the number 0 is
 (a) Counting numbers (b) Rational numbers (c) Integers (d) natural numbers



- 69** Which of the following is the greatest number ?
 (a) -5.3 (b) -3.5 (c) 3.5 (d) 5.3
- 70** Which of the following is the smallest number ?
 (a) -3.2 (b) -2.3 (c) -0.5 (d) -0.01
- 71** The best subset for the number -3 is
 (a) Counting numbers (b) Rational numbers (c) Integers (d) natural numbers
- 72** The range can not be found using.....
 (a) dot plot (b) histogram (c) box plot (d) all of them
- 73** If the mean of 8, 6, x, 5 is 5, then x =
 (a) 1 (b) 2 (c) 3 (d) 4
- 74** The mean of the values "54, 32, 30 ,4" is.....
 (a) 18 (b) 30 (c) 4 (d) 54
- 75** The LCM of 5 and 15 is
 (a) 5 (b) 15 (c) 1 (d) 3
- 76** The GCF of 5 and 15 is
 (a) 5 (b) 15 (c) 1 (d) 3
- 77** The common factor of all number is
 (a) 0 (b) 1 (c) 2 (d) 100
- 78** If the cost of one ticket "h" and the total cost of 5 tickets "m", Then the independent variable is.....
 (a) m (b) h (c) 5 (d) 5 h
- 79** If the cost of one ticket "h", then total cost of 5 tickets is
 (a) m (b) h (c) 5 (d) 5 h
- 80** The order pair which satisfies the equation : $y = x + 2$
 (a) (0, 2) (b) (1, 1) (c) (2, 1) (d) (1, 2)
- 81** Which of the following is numerical expression ?
 (a) $3(6d + 5)$ (b) $8 + 6$ (c) $2n - 9$ (d) $4 - h$
- 82** Which of the following is algebraic expression ?
 (a) $4(6 + 5)$ (b) $4 - 1 + 2$ (c) $20 \div 9$ (d) $3h$
- 83** The integer which comes just after -1 is
 (a) 0 (b) 1 (c) -2 (d) -1



- 84 The integer that is one less than 0 is
 (a) 0 (b) 1 (c) -2 (d) -1
- 85 All counting numbers are also
 (a) natural numbers (b) Rational numbers (c) Integers (d) All of them
- 86 $|-10| > \dots\dots\dots$
 (a) $|-9.99|$ (b) $|-90|$ (c) $|-100|$ (d) $|-15|$
- 87 $5(8 + \dots\dots) \times 7$ is a numerical expression .
 (a) d (b) $4f$ (c) 5 (d) $19 + n$
- 88 $5(8 + \dots\dots) \times 7$ is a algebraic expression .
 (a) 5 (b) $5m$ (c) $18 + 2$ (d) 13
- 89 Adding 5 to third a number =
 (a) $5 + 3x$ (b) $3x + 5$ (c) $\frac{1}{3}x - 5$ (d) $\frac{1}{3}x + 5$
- 90 The distance between -6 and its opposite on the number line is
 (a) 6 (b) -6 (c) 12 (d) -12
- 91 $|-15| = m$, then $m = \dots\dots\dots$
 (a) -15 (b) 15 (c) Both a,b (d) neither
- 92 $|-x| = 5$, then $x = \dots\dots\dots$
 (a) -5 (b) 5 (c) Both a,b (d) neither
- 93 The number of terms in the expression $6d + 2 - 5n \div 4$ is terms
 (a) 1 (b) 2 (c) 3 (d) 4
- 94 The like terms in the expression $2f + 2 - 2k - 8$ is
 (a) $2f, 2k$ (b) $2, 8$ (c) $2, 2k$ (d) $2f, 2$
- 95 The constant in the expression $6d + 2 - 5n$ is
 (a) 6 (b) d (c) $5n$ (d) 2
- 96 The coefficient in the expression $6d + 2$ is
 (a) 6 (b) d (c) $6d$ (d) 2
- 97 The balance (mean) of the following date set 1, 2, 3, 4, 4, 6, 8 is.....
 (a) 2 (b) 6 (c) 4 (d) 8
- 98is another name for the mean .
 (a) Median (b) Range (c) Mode (d) Average



Question 02

Complete

- 1 6 cubed =
- 2 5 squared =
- 3 $5^2 + 6 - 2^3 =$
- 4 If the number of chicken owned is "t" and the number of eggs collected daily is "h", then the independent variable is
- 5 The lower quartile for the set of data : 5, 7, 9 ,10 ,12 ,15 , 20 is.....
- 6 The graph shows gaps and cluster is
- 7 The graph shows distribution and spread is
- 8 The upper quartile of the values "7, 1, 6 , 2 , 3 ,1 , 9 " is.....
- 9 The median of the values "2, 7, 10 , 0 , 2 , 5 , 6 , 6 , 12 , 1" is.....
- 10 If the upper quartile of the values : $x + 14, x + 10, x + 12, x + 15, x + 16, x + 11, x + 14, x + 17$ where x is a positive integer is 18.5, then x =
- 11 $5x = 20$, then $\frac{1}{2}x =$
- 12 $100x = 0$, then $12x =$
- 13 $100x = 100$, then $12x =$
- 14 $\frac{x}{5} = 6$, then x =
- 15 $3n = 15$, then n =
- 16 $X + 5.4 = 7.8$, then x =
- 17 $7x = 28$, then $\frac{1}{2}x =$
- 18 " F equals the product of m and 6 " as an equation is
- 19 The inequality that represent the negative integers is
- 20 we use.....to see exactly how many times each individual values occurs.
- 21 The inequality that represent the positive integers is
- 22 The smallest natural number is
- 23 The inequality that represent the non-negative integers is
- 24 The inequality that represent the non-positive integers is



- 25 The graph shows the 5-number summary is
- 26 The graph shows the set of data in form of intervals is
- 27 " Twice x added to 7 equals y " as an algebraic equation is
- 28 " $m = 5d - 5$ " as an verbal is
- 29 In the equation : $d = \frac{5}{9}n - 8$ the dependent variable is
- 30 The verbal phrase for $k + 10 = 12$ is
- 31 " 20 more than v equals m " in equation is
- 32 The rule is " multiply by 8 " . if $x = \frac{1}{4}$,then y would be
- 33 4 more than s equals t in equation is
- 34 The word phrase for the equation " $h = 8g$ " is
- 35 The ordered pair which satisfies the rule: $y = x + 5$ is (1,)
- 36 In the rule : $y = 4x$, if $x = 1.5$ then $y = \dots\dots\dots$
- 37 The verbal phrase for : $2m + 4 = 8$ is
- 38 $5 - 3\frac{2}{5} = \dots\dots\dots$
- 39 " z equals the sum of adding 12 to the product of 4 and y" the equation is
- 40 The dependent variable in the equation $a = 4b + \frac{1}{2}$ is.....
- 41= maximum value – minimum value
- 42 The maximum values for the set of values " 4,7,9,1,6" is.....
- 43 The favourite colours of a number of pupils are..... data.
- 44 If the mean of 5 values is 15, then the sum of these values is.....
- 45 If the marks of 6 pupils in one of the tests are 29, 33,57,40,36 and 49, then the range for these marks is equal to.....
- 46 The number of integers between -5 and -1 are
- 47 The smallest counting number is
- 48 The value of the expression $2x^2 - (2 \times 3 + 3^2)$ for $x = 3$ is
- 49 If the price of one pen is 6 pounds , then the price of x pens is
- 50 If the price of 10 pens is x pounds , then the price of one pen is
- 51 In 5^4 the base isand the exponent is



- 52 The base is 8 and the exponent is 3 , then the exponential form of this is
- 53 In a square the side length is x then the perimeter is and the area is
- 54 are the values that lie away the other values.
- 55is the middle values of the data set.
- 56 The additive inverse of -6 is
- 57 The additive inverse of 0 is
- 58 The LCM of 5 and 7 is
- 59is the value that occurs most often .
If 50 is the greatest number of data set and the range = 10 ,then
- 60 The smallest number of this data set equals.....
- 61 The number -2.5 in the form $\frac{a}{b}$ is
- 62 The opposite of the number 50 is
- 63 The integer which comes just before -9 is
- 64 The GCF of 5 and 7 is
- 65 The outlier of the following date set 91, 94, 93, 3, 90, 99 is.....
- 66 The mode of the following set "3,4, 5,3,5,7,5,9,5,3" is.....
- 67 The range of the set of values 6, 5, 9,4,11,3, 7 is.....
- 68 If the range of a set of values is 12 and the smallest value is 8, then
the largest values is.....
- 69 If the sum of a group of values is 18 and the mean of these values is 3, then the number of
these values is.....
- 70 The smallest positive integer is
- 71 The smallest non-negative integer is
- 72 The greatest non-positive integer is
- 73 type of data is or
- 74 What is your favourite school subject? is..... question.
- 75 The GCF of 8 and 9 is
- 76 The LCM of 8 and 9 is
- 77 $864 \div 24 =$

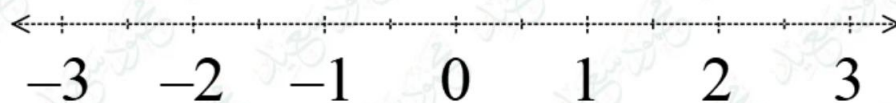


- 78is a multiple of all numbers .
- 79is a factor of all numbers .
- 80 The number of terms in the expression $6h + 2d - 3x$ isterms
- 81 The constant in the expression $5f + 2b + 3$ is
- 82 $|-5| + 3 = \dots\dots\dots$
- 83 The graph shows spread of the data in each quarter is.....
- 84 data is written in the form of numbers.
- 85 The types of pens preferred by your class's students is adate.
- 86 The median of the following date set "4, 5,7,7,8,9,9" is.....
- 87 $|-18| \times 0 = \dots\dots\dots$
- 88 The algebraic expression of a number less than 5 is
- 89 The algebraic expression of a number less 5 is
- 90 The coefficient in the expression $-5d + 3$ is
- 91 The product of 5 and a number t is
- 92 Twice the difference between a number and 6 is

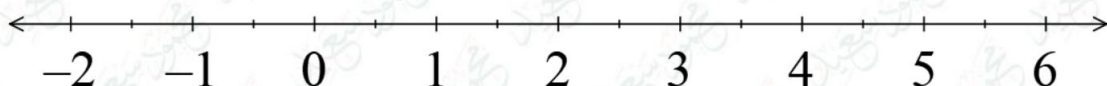
Question 03

Answer the following questions

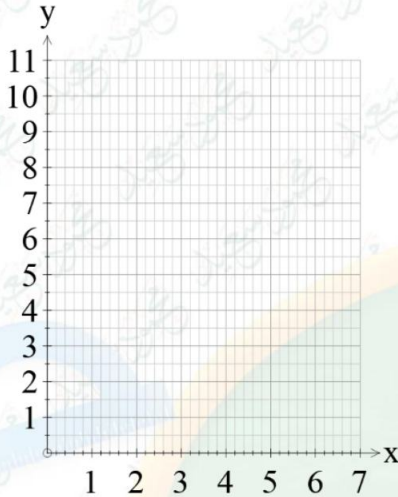
- 1** Simplify the following :
- 1) $6^2 + 2(24 - 9) \div 3$
- 2) $8 - 4 \times 6 \div (5 - 3)^3$
-
- 2** Mohamed has x pounds . he bought a book for 60 pounds . write the algebraic expression of how much money with him now .
-
- 3** Represent $-2\frac{2}{5}$ on the number line .



- 4 Represent $5 \geq x$ on the number line in the set of integers.



- 5 Write an equation. Use the variables x and y , where x is the independent variable .
Write the equation " add 1 and multiply by 2 " and substitute x by 1,2,3 and 4 to evaluate y .
then complete the table ,then represent the table on a graph .



Equation is :

X	1	2	3	4
y

- 6 Write a verbal phrase for each of the following :
a) $f + 10 = m$ b) $b = 5 - k$ c) $2n + 8 = a$

.....
.....

- 7 Complete the following table according to the equation : $y = 3x - 1$

X	1	3	5	7
y

- 8 Masa needed to earn at least 100 pounds daily to buy a mobile . find four possible amounts that Masa needed to earn ,then write the inequality that represented this situation .

.....

- 9 Joudy paid 3,888 pounds to buy 24 candies . find the price of each box .

.....

- 10 Find three rational numbers between 3.5 and 3.6

.....

- 11 Write an equation, use the variables x and y , where x is the independent and using the rule " multiply by 8 ", then substitute $x = \frac{1}{2}$ to evaluate y .

.....



12 Write each the verbal phrase as an algebraic equation :

(a) m equals twice n increased by 20

(b) y equals the product of eight and x added to 48

13 When $m = 3$, solve $9 + (m^2 - 3) \div 2$

14 Rodina has 30 pounds , she will save 10 pounds daily . write the algebraic expression , then evaluate how much money will she have after 1 week ?

15 Write a verbal phrase for each of the following equation :

a) $y = 3x + 1$

b) $y + 5 = x$

c) $g = (h \div 3) + 12$

16 Write an equation, use the variables x and y where x is the independent variable ,then evaluate y

a) The equation " multiply by 6", substitute if $x = 7$

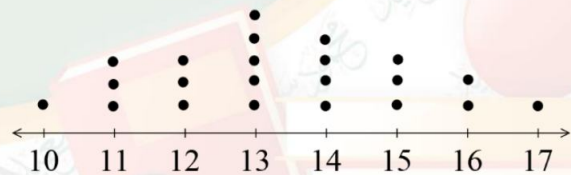
b) The equation " multiply by 2 and add 3", substitute if $x = 2$

17 By using the opposite dot plot find :

(a) The median

(b) The mode

(c) The range



18 If the number of goals registered by Al Zamalek in 6 matches are 3, 2, 6, 6, 1, 6

Calculated the mean , median and mode of the number of goals.

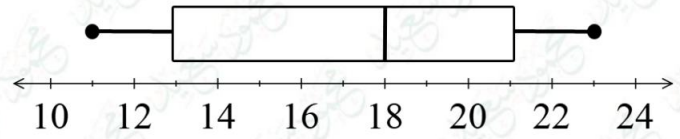
19 Rahma runs 3 km on Saturday, 5 km Sunday, 4 km Monday 4 km Tuesday and 4 km Friday

Find the mean distance covered by Rahma .



20 from the opposite box plot, complete

- (a) The maximum value =
 (b) The minimum value =
 (c) the median =
 (d) the lower quarter =
 (e) the upper quarter =



21 Solve each of the following equations :

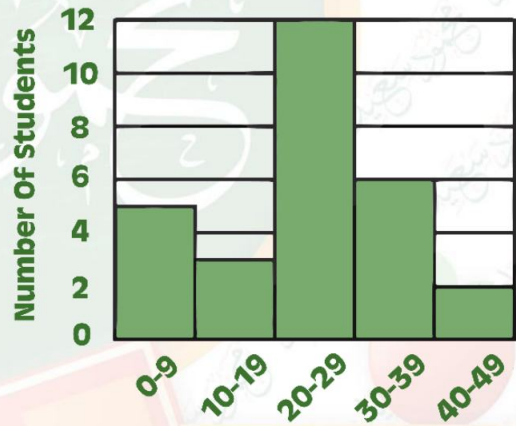
- (a) $\frac{x}{4} = 3$
 (b) $12x - 5 = 7$

22 from the histogram shown at the right answer the following questions .

1. Which interval represents the most number of students?
 2. Which interval has three students?
 3. How many students went to a pool at least 30 times last summer?

4. How many students went to a pool less than ten times last summer?

Number of visits to a pool
Last summer



Number Of visits

تم بحمد الله ،

بسم الله الرحمن الرحيم " إِنَّ الَّذِينَ آمَنُوا وَعَمِلُوا الصَّالِحَاتِ إِنَّا لَا نُضِيعُ أَجْرَ مَنْ أَحْسَنَ عَمَلًا " صدق الله العظيم



بنك الاسئلة

الصف
السادس
الابتدائي
٢٠٢٤

التميز

أ/ محمود سعيد

Model Answers

Math

Final Revision

٨٢

MR. Mahmoud Elkhoully



6

الصف
السادس



El.Motamyez.School

يمكنكم الحصول على المذكرات والاختبارات من خلال مسح رمز ال QR Code
أو من خلال صفحة "التميز - أ/ محمود سعيد".
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First term Questions Bank



Question 01

Choose the correct answer

- 1 Take away double the number m from 20 is written as
 (a) $20 - m$ (b) $m - 20$ (c) $2m - 20$ (d) $20 - 2m$
- 2 The volume of the cube of edge length 4 cm is cm^3
 (a) 12×4 (b) $4 + 4 + 4$ (c) 4^3 (d) 3^4
- 3 $3 \times 3 \times 3 \times 3 \times 3 =$
 (a) 3×5 (b) $3 + 3 + 3 + 3 + 3$ (c) 3^5 (d) 5^3
- 4 $3 + 3 + 3 + 3 + 3 =$
 (a) 3×5 (b) $3 \times 3 \times 3 \times 3 \times 3$ (c) 3^5 (d) 5^3
- 5 The value of the expression $5m \div 3$ for $m = 6$ is
 (a) 3 (b) 5 (c) 6 (d) 10
- 6 The first operation you perform in the expression $6 + (5^3 - 4) \div 2$ is
 (a) add (b) Subtract (c) exponent (d) Divide
- 7 The first operation you perform in the expression $6 + 5^3 - (4 \div 2)$ is
 (a) add (b) Subtract (c) exponent (d) Divide
- 9 Seven cubed added to six squared equals
 (a) $7 \times 3 + 6 \times 2$ (b) $6^2 + 7^3$ (c) $6^2 - 7^3$ (d) $2^6 + 3^7$
- 10 Rozana saved x pounds. Mr Mahmoud Elkholy gave her 20 pounds, then she havepounds now .
 (a) $X - 20$ (b) 45 (c) $X + 20$ (d) $20 \times$
- 11 If $x + 5 = 8$, then $3x =$
 (a) 3 (b) 5 (c) 9 (d) 15
- 12 A number if added to 5 the result is 17, then the number is
 (a) 12 (b) 22 (c) 5 (d) 17
- 13is a solution of the inequality $d > 15$
 (a) 15 (b) 12 (c) 20 (d) All of them



- 14is a solution of the inequality $d \geq 15$
 (a) 15 (b) 16 (c) 20 (d) All of them
- 15 The mode of 7, 9, 7, 8, 7, 6, 7 and 10 is.....
 (a) 7 (b) 8 (c) 9 (d) 10
- 16 All the dot plots have the following characteristics except
 (a) dot plot should have titles (b) dot plots should have data graphed above a number line
 (c) the number lines in dot plots should start at 0 (d) each individual piece of data can be seen on a dot plot and is represented by a dot.
- 17 A has two axes, horizontal and vertical.
 (a) bar graph (b) histogram (c) double bar graph (d) all of them
- 18 The question : what are the students favourite colours? Is a..... question
 (a) statistical (b) non-statistical (c) numerical data (d) All of them
- 19 The range = the greatest value..... the smallest values.
 (a) + (b) - (c) \div (d) \times
- 20 The best subset for the number 5 is
 (a) Counting numbers (b) Rational numbers (c) Integers (d) natural numbers
- 21 The best subset for the number 5.2 is
 (a) Counting numbers (b) Rational numbers (c) Integers (d) natural numbers
- 22 The Set of counting numbers The set of rational numbers
 (a) Belong (b) not belong (c) subset (d) Not subset
- 23 The Set of integers The set of natural numbers
 (a) Belong (b) not belong (c) subset (d) Not subset
- 24 -5 The set of rational numbers
 (a) Belong (b) not belong (c) subset (d) Not subset
- 25 r is 9 times p added to twice m in the equation is.....
 (a) $r = 9p + m$ (b) $r = 2m + 9p$ (c) $9r = p + 2m$ (d) $r + m = 9p$



- 26 In the equation : $y = x + 1$, if the output is 1, then the input is....
 (a) 1 (b) 3 (c) 2 (d) 0
- 27 The order pair which satisfies the rule : $y = 3x + 1$ is.....
 (a) (0, 0) (b) (0, 4) (c) (-1, 1) (d) (1, 4)
- 28 which of the following data set hasn't any outlier?
 (a) 103,104,105,103,102,17 (b) 24,25,26,21,22,23,204
 (c) 300, 309,302,303,305,306,308 (d) 4,211,212,213,214,215,1000
- 29 Youssef eat at least 3 oranges , then Youssef may eatoranges
 (a) 3 (b) 5 (c) 12 (d) All of them
- 30 Layan has 25 pounds and Maya has more money than Layan , then Maya may haspounds .
 (a) 25 (b) 20 (c) 100 (d) All of them
- 31 Ziad has 16 candies and Kareem has less candies than Ziad , then Kareem may hascandies .
 (a) 100 (b) 16 (c) 10 (d) All of them
- 32 Jana bought 6 SPIRO SPATHIS and Mohamed bought same number or more ,then Mohamed may bought SPIRO SPATHIS .
 (a) 6 (b) 12 (c) 100 (d) All of them
- 33 All of the following are solutions of inequality $x \leq -8$ except
 (a) -8 (b) -10 (c) -7 (d) All of them
- 34 In the equation : $5x + 2 = y$, the independent variable is
 (a) 5 (b) 2 (c) x (d) y
- 35 In the equation : $b = \frac{1}{2}f + 3$, the dependent variable is
 (a) 5 (b) 2 (c) f (d) b
- 36 The GCF of any two different prime numbers is
 (a) 0 (b) 1 (c) itself (d) The smallest number
- 37 $\frac{3}{6} + \frac{1}{2} = \dots\dots\dots$
 (a) $\frac{1}{2}$ (b) $\frac{3}{6}$ (c) 1 (d) $\frac{4}{8}$
- 38 Which of the following is an equation ?
 (a) $3n + 7$ (b) 7 times the number h (c) $3c = 3$ (d) $6e - 7$



- 39 (2, m) satisfies the rule $y = 3x - 2$, then $m =$
 (a) 1 (b) 2 (c) 3 (d) 4
- 40 In the equation : $y = 2x + 10$, the ordered pair (3, n) satisfies the equation, then $n =$
 (a) 2 (b) 10 (c) 16 (d) 30
- 41 "Y is 6 times h added to 12" in equation is
 (a) $12 = y + 6h$ (b) $Y = 12h + 6$ (c) $H = 6y + 12$ (d) $Y = 6h + 12$
- 42 (.....,) is called the origin .
 (a) (1, 1) (b) (0, 1) (c) (0, 0) (d) (1, 0)
- 43 The greatest negative integer is
 (a) 1 (b) -1 (c) 0 (d) -1000,000
- 44 $\frac{3}{7} + \frac{2}{5} =$
 (a) $\frac{5}{12}$ (b) $\frac{29}{35}$ (c) $\frac{1}{2}$ (d) 1
- 47 $3(5 + 4) = (3 \times \text{.....}) + (\text{.....} \times 4)$
 (a) 5,3 (b) 5,4 (c) 3,5 (d) 3,4
- 48 In the equation the : $y = 2x + 3$, the ordered pair (2, a) satisfies the equation then, $a =$
 (a) 5 (b) 8 (c) 7 (d) 9
- 49 The median of the value 4, 7, 8, 1 and 3 is
 (a) 3 (b) 1 (c) 4 (d) 7
- 50 The median of $B + 1$, $B + 2$, $B + 3$ is 10, then $B =$
 (a) 1 (b) 3 (c) 2 (d) 8
- 51 If the upper quartile of the values : $m + 1$, $m + 2$, $m + 3$, $m + 4$, $k + 5$, where m is a positive integer is 16.5, then $m =$
 (a) 7 (b) 8 (c) 12 (d) 10
- 52 All the following are numerical data except.....
 (a) names (b) ages (c) length (d) temperatures
- 53 The opposite of the number 15 is
 (a) 15 (b) |15| (c) -15 (d) |-15|
- 54 The additive inverse of $|-4|$ is
 (a) 4 (b) |4| (c) -4 (d) |-4|



- 55 In the equation : $x = 5y + 3$, the dependent variable is.....
 (a) $5y$ (b) x (c) y (d) 3
- 56 In the equation : $4a + 24 = b$, the independent variable is.....
 (a) a (b) b (c) 24 (d) $4a$
- 57 "k equals the product of m and 4" in equation is.....
 (a) $k = 4m$ (b) $k = 4 + m$ (c) $m = 4k$ (d) $m = k + 4$
- 58 which of the following is an equation?
 (a) $20x + 53.2$ (b) $2 + m$ (c) $Y > 12$ (d) $5x = 20$
- 59 "30 less than f equals y" in the equation is.....
 (a) $30 - f = y$ (b) $30 + f = y$ (c) $F - 30 = y$ (d) $Y - 30 = f$
- 60 If $(4, \dots)$ satisfies the rule $y = \frac{1}{2}x + 2$
 (a) 4 (b) 10 (c) 6 (d) 2
- 61 $\frac{9}{2}$ The set of natural numbers
 (a) Belong (b) Does not belong (c) subset (d) Not subset
- 62 is categorical data.
 (a) age (b) phone number (c) weight (d) favourite TV show
- 63 is numerical data
 (a) nationality (b) Place of birth (c) Exam degree (d) name
- 64 The LCM of any two different prime numbers is
 (a) 1 (b) The product of them (c) The smallest number (d) The greatest number
- 65 The dividend in $321 \div 12 = 26 \text{ R}9$ is
 (a) 321 (b) 12 (c) 26 (d) 9
- 66 is the better measure of centre for data set with outlier values.
 (a) Median (b) Range (c) Mode (d) mean
- 67 Which of the following is nearest to zero ?
 (a) 5 (b) -1 (c) -3 (d) 3
- 68 The best subset for the number 0 is
 (a) Counting numbers (b) Rational numbers (c) Integers (d) natural numbers



- 69 Which of the following is the greatest number ?
 (a) -5.3 (b) -3.5 (c) 3.5 (d) 5.3
- 70 Which of the following is the smallest number ?
 (a) -3.2 (b) -2.3 (c) -0.5 (d) -0.01
- 71 The best subset for the number -3 is
 (a) Counting numbers (b) Rational numbers (c) Integers (d) natural numbers
- 72 The range can not be found using.....
 (a) dot plot (b) histogram (c) box plot (d) all of them
- 73 If the mean of 8, 6, x, 5 is 5, then x =
 (a) 1 (b) 2 (c) 3 (d) 4
- 74 The mean of the values "54, 32, 30 ,4" is.....
 (a) 18 (b) 30 (c) 4 (d) 54
- 75 The LCM of 5 and 15 is
 (a) 5 (b) 15 (c) 1 (d) 3
- 76 The GCF of 5 and 15 is
 (a) 5 (b) 15 (c) 1 (d) 3
- 77 The common factor of all number is
 (a) 0 (b) 1 (c) 2 (d) 100
- 78 If the cost of one ticket "h" and the total cost of 5 tickets "m", Then the independent variable is.....
 (a) m (b) h (c) 5 (d) 5h
- 79 If the cost of one ticket "h", then total cost of 5 tickets is
 (a) m (b) h (c) 5 (d) 5h
- 80 The order pair which satisfies the equation : $y = x + 2$
 (a) (0, 2) (b) (1, 1) (c) (2, 1) (d) (1, 2)
- 81 Which of the following is numerical expression ?
 (a) $3(6d + 5)$ (b) $8 + 6$ (c) $2n - 9$ (d) $4 - h$
- 82 Which of the following is algebraic expression ?
 (a) $4(6 + 5)$ (b) $4 - 1 + 2$ (c) $20 \div 9$ (d) $3h$
- 83 The integer which comes just after -1 is
 (a) 0 (b) 1 (c) -2 (d) -1



- 84 The integer that is one less than 0 is
 (a) 0 (b) 1 (c) -2 (d) -1
- 85 All counting numbers are also
 (a) natural numbers (b) Rational numbers (c) Integers (d) All of them
- 86 $|-10| > \dots\dots\dots$
 (a) $|-9.99|$ (b) $|-90|$ (c) $|-100|$ (d) $|-15|$
- 87 $5(8 + \dots\dots) \times 7$ is a numerical expression .
 (a) d (b) $4f$ (c) 5 (d) $19 + n$
- 88 $5(8 + \dots\dots) \times 7$ is a algebraic expression .
 (a) 5 (b) $5m$ (c) $18 + 2$ (d) 13
- 89 Adding 5 to third a number =
 (a) $5 + 3x$ (b) $3x + 5$ (c) $\frac{1}{3}x - 5$ (d) $\frac{1}{3}x + 5$
- 90 The distance between -6 and its opposite on the number line is
 (a) 6 (b) -6 (c) 12 (d) -12
- 91 $|-15| = m$, then $m = \dots\dots\dots$
 (a) -15 (b) 15 (c) Both a,b (d) neither
- 92 $|-x| = 5$, then $x = \dots\dots\dots$
 (a) -5 (b) 5 (c) Both a,b (d) neither
- 93 The number of terms in the expression $6d + 2 - 5n \div 4$ is terms
 (a) 1 (b) 2 (c) 3 (d) 4
- 94 The like terms in the expression $2f + 2 - 2k - 8$ is
 (a) $2f, 2k$ (b) $2, 8$ (c) $2, 2k$ (d) $2f, 2$
- 95 The constant in the expression $6d + 2 - 5n$ is
 (a) 6 (b) d (c) $5n$ (d) 2
- 96 The coefficient in the expression $6d + 2$ is
 (a) 6 (b) d (c) $6d$ (d) 2
- 97 The balance (mean) of the following date set 1, 2, 3, 4, 4, 6, 8 is.....
 (a) 2 (b) 6 (c) 4 (d) 8
- 98is another name for the mean .
 (a) Median (b) Range (c) Mode (d) Average



Question 02

Complete

- 1 6 cubed = 6^3
- 2 5 squared = 5^2
- 3 $5^2 + 6 - 2^3 =$ 23.....
- 4 If the number of chicken owned is "t" and the number of eggs collected daily is "h", then the independent variable ist.....
- 5 The lower quartile for the set of data : 5, 7, 9, 10, 12, 15, 20 is...7...
- 6 The graph shows gaps and cluster is dot plot.....
- 7 The graph shows distribution and spread isbox plot.....
- 8 The upper quartile of the values "7, 1, 6, 2, 3, 1, 9" is.....7.....
- 9 The median of the values "2, 7, 10, 0, 2, 5, 6, 6, 12, 1" is...5.5..
- 10 If the upper quartile of the values : $x + 14, x + 10, x + 12, x + 15, x + 16, x + 11, x + 14, x + 17$ where x is a positive integer is 18.5, then $x =$ 3.....
- 11 $5x = 20$, then $\frac{1}{2}x =$...2.....
- 12 $100x = 0$, then $12x =$...0.....
- 13 $100x = 100$, then $12x =$ 12.....
- 14 $\frac{x}{5} = 6$, then $x =$...30.....
- 15 $3n = 15$, then $n =$ 5.....
- 16 $X + 5.4 = 7.8$, then $x =$ 3.4.....
- 17 $7x = 28$, then $\frac{1}{2}x =$ 2.....
- 18 "F equals the product of m and 6" as an equation is $f = 6m$
- 19 The inequality that represent the negative integers is $x \leq -1$
- 20 we use..... dot plot.....to see exactly how many times each individual values occurs.
- 21 The inequality that represent the positive integers is $x \geq -1$
- 22 The smallest natural number is0.....
- 23 The inequality that represent the non-negative integers is ... $x \geq 0$
- 24 The inequality that represent the non-positive integers is $x \leq 0$



- 25 The graph shows the 5-number summary is**box plot**.....
- 26 The graph shows the set of data in form of intervals is**histogram**.....
- 27 " Twice x added to 7 equals y " as an algebraic equation is ... **$y = 7 + 2x$**
- 28 " $m = 5d - 5$ " as an verbal is ...**m equals 5 times d decreased by 5**
- 29 In the equation : $d = \frac{5}{9}n - 8$ the dependent variable is**d**.....
- 30 The verbal phrase for $k + 10 = 12$ is**the sum of a number and 10 equals 12**
- 31 " 20 more than v equals m " in equation is **$v + 20 = m$**
- 32 The rule is " multiply by 8 " . if $x = \frac{1}{4}$,then y would be**2**.....
- 33 4 more than s equals t in equation is **$s + 4$**
- 34 The word phrase for the equation " $h = 8g$ " is ... **h equals 8 times g**...
- 35 The ordered pair which satisfies the rule: $y = x + 5$ is (1, ..**6**...)
- 36 In the rule : $y = 4x$, if $x = 1.5$ then $y = \cdots$ **6** ...
- 37 The verbal phrase for : $2m + 4 = 8$ is**double m increased by 4 equal 8**
- 38 $5 - 3\frac{2}{5} = \cdots$ **$1\frac{3}{5}$**
- 39 " z equals the sum of adding 12 to the product of 4 and y" the equation is **$z = 4y + 12$**
- 40 The dependent variable in the equation $a = 4b + \frac{1}{2}$ is.....**a**.....
- 41**range**.....= maximum value – minimum value
- 42 The maximum values for the set of values " 4,7,9,1,6" is..**9**...
- 43 The favourite colours of a number of pupils are..... **categorical**..... data.
- 44 If the mean of 5 values is 15, then the sum of these values is....**75**....
- 45 If the marks of 6 pupils in one of the tests are 29, 33,57,40,36 and 49, then the range for these marks is equal to....**28**....
- 46 The number of integers between -5 and -1 are**3**.....
- 47 The smallest counting number is**1**.....
- 48 The value of the expression $2x^2 - (2 \times 3 + 3^2)$ for $x = 3$ is**3**.....
- 49 If the price of one pen is 6 pounds , then the price of x pens is **$6x$**
- 50 If the price of 10 pens is x pounds , then the price of one pen is **$x \div 10$**
- 51 In 5^4 the base is**5**.....and the exponent is**4**.....



- 52 The base is 8 and the exponent is 3 , then the exponential form of this is 8^3
- 53 In a square the side length is x then the perimeter is $4x$ and the area is x^2
- 54outlier..... are the values that lie away the other values.
- 55median.....is the middle values of the data set.
- 56 The additive inverse of -6 is6.....
- 57 The additive inverse of 0 is0.....
- 58 The LCM of 5 and 7 is35.....
- 59mode.....is the value that occurs most often .
- 60 If 50 is the greatest number of data set and the range = 10 ,then The smallest number of this data set equals.....40.....
- 61 The number -2.5 in the form $\frac{a}{b}$ is $-\frac{25}{10}$
- 62 The opposite of the number 50 is-50.....
- 63 The integer which comes just before -9 is-10.....
- 64 The GCF of 5 and 7 is1.....
- 65 The outlier of the following date set 91, 94, 93, 3, 90, 99 is.....3.....
- 66 The mode of the following set "3,4, 5,3,5,7,5,9,5,3" is...3.....
- 67 The range of the set of values 6, 5, 9,4,11,3, 7 is.....8.....
- 68 If the range of a set of values is 12 and the smallest value is 8, then the largest values is.....20.....
- 69 If the sum of a group of values is 18 and the mean of these values is 3, then the number of these values is...6.....
- 70 The smallest positive integer is1.....
- 71 The smallest non-negative integer is0.....
- 72 The greatest non-positive integer is0.....
- 73 type of data is categorical..... or numerical.....
- 74 What is your favourite school subject? is a..... non-statistical..... question.
- 75 The GCF of 8 and 9 is1.....
- 76 The LCM of 8 and 9 is72.....
- 77 $864 \div 24 =$ 36.....

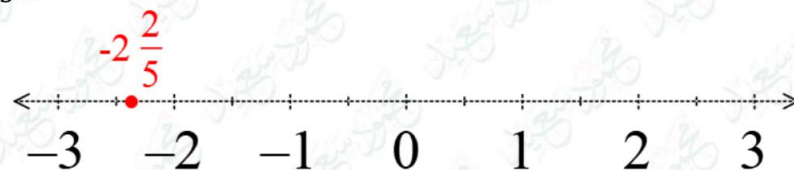


- 780.....is a multiple of all numbers .
- 791.....is a factor of all numbers .
- 80 The number of terms in the expression $6h + 2d - 3x$ is3.....terms
- 81 The constant in the expression $5f + 2b + 3$ is3.....
- 82 $|-5| + 3 =$ 8.....
- 83 The graph shows spread of the data in each quarter is... box plot....
- 84 numerical..... data is written in the form of numbers.
- 85 The types of pens preferred by your class's students is acategorical.... date.
- 86 The median of the following date set "4, 5, 7, 7, 8, 9, 9" is...7....
- 87 $|-18| \times 0 =$ 0.....
- 88 The algebraic expression of a number less than 5 is5-x.....
- 89 The algebraic expression of a number less 5 isx-5.....
- 90 The coefficient in the expression $-5d + 3$ is-5.....
- 91 The product of 5 and a number t is5t.....
- 92 Twice the difference between a number and 6 is ...2(x-6).....

Question 03

Answer the following questions

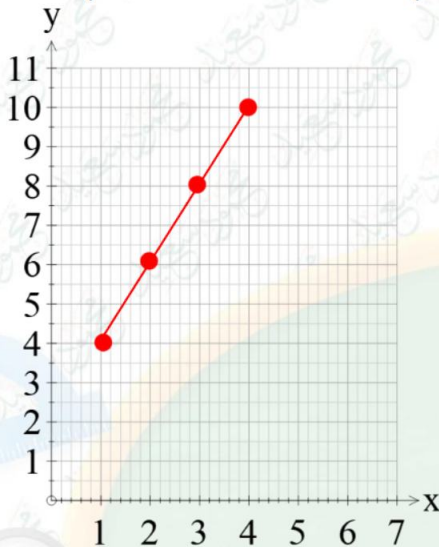
- 1 Simplify the following :
 1) $6^2 + 2(24 - 9) \div 3$ 2) $8 - 4 \times 6 \div (5 - 3)^3$
 1) 46 2) 5
- 2 Mohamed has x pounds . he bought a book for 60 pounds . write the algebraic expression of how much money with him now .
X - 60
- 3 Represent $-2\frac{2}{5}$ on the number line .



- 4 Represent $5 \geq x$ on the number line in the set of integers .



- 5 Write an equation. Use the variables x and y , where x is the independent variable .
Write the equation " add 1 and multiply by 2 " and substitute x by 1,2,3 and 4 to evaluate y .
then complete the table ,then represent the table on a graph .



Equation is : $[x+1] \times 2$

X	1	2	3	4
y	4	6	8	10

- 6 Write a verbal phrase for each of the following :
a) $f + 10 = m$ b) $b = 5 - k$ c) $2n + 8 = a$

a) 10 more than f equals m
b) b equals 5 decreased by k
c) the sum of twice n and 8 equals a

- 7 Complete the following table according to the equation : $y = 3x - 1$

X	1	3	5	7
y	2	8	14	20

- 8 Masa needed to earn at least 100 pounds daily to buy a mobile . find four possible amounts that Masa needed to earn ,then write the inequality that represented this situation .

100 , 150 , 200 , 300 - $x \geq 100$

- 9 Joudy paid 3,888 pounds to buy 24 candies . find the price of each box .

$3,888 \div 24 = 162$ pounds

- 10 Find three rational numbers between 3.5 and 3.6

3.51 , 3.52 , 3.53

- 11 Write an equation, use the variables x and y , where x is the independent and using the rule " multiply by 8 ", then substitute $x = \frac{1}{2}$ to evaluate y .

The equation is $y = 8x$, then $y = \frac{1}{2} \times 8 = 4$



12 Write each the verbal phrase as an algebraic equation :

(a) m equals twice n increased by 20

(b) y equals the product of eight and x added to 48

a) $m = 2n + 20$

b) $y = 48 + 8x$

13 When $m = 3$. solve $9 + (m^2 - 3) \div 2$

12

14 Rodina has 30 pounds , she will save 10 pounds daily . write the algebraic expression , then evaluate how much money will she have after 1 week ?

The expression is $30 + 10d$

Money with her = $30 + 10 \times 7 = 100$ pounds

15 Write a verbal phrase for each of the following equation :

a) $y = 3x + 1$

b) $y + 5 = x$

c) $g = (h \div 3) + 12$

a) y equals 3 times x increased by 1

b) the sum of y and 5 is x

c) g equals the sum of h divided by 3 and 12

16 Write an equation, use the variables x and y where x is the independent variable ,then evaluate y

a) The equation " multiply by 6", substitute if $x = 7$

b) The equation " multiply by 2 and add 3", substitute if $x = 2$

a) $y = 6x$, then $y = 6 \times 7 = 42$

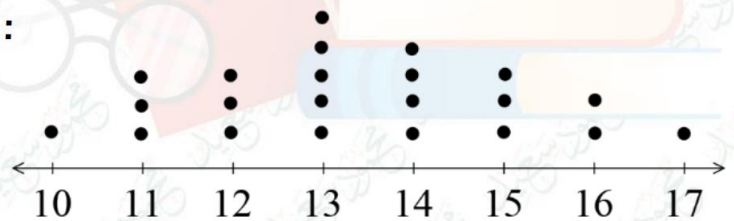
b) $y = 2x + 3$, then $y = 2 \times 2 + 3 = 7$

17 By using the opposite dot plot find :

(a) The median

(b) The mode

(c) The range



Median = 13 , mode = 13 , range = 7

18 If the number of goals registered by Al Zamalek in 6 matches are

3, 2, 6, 6, 1, 6

Calculated the mean , median and mode of the number of goals.

Mean = $24 \div 6 = 4$

Median = $9 \div 2 = 4.5$

Mode = 6



- 19 Rahma runs 3 km on Saturday, 5 km Sunday, 4 km Monday 4 km Tuesday and 4 km Friday

Find the mean distance covered by Rahma .

$$\text{Mean} = 20 \div 5 = 4$$

- 20 from the opposite box plot, complete

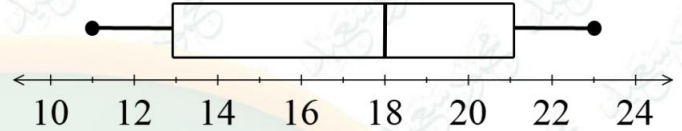
(a) The maximum value =23.....

(b) The minimum value =11.....

(c) the median =18.....

(d) the lower quarter = ...13....

(e) the upper quarter =21.....



- 21 Solve each of the following equations :

(a) $\frac{x}{4} = 3$

(b) $12x - 5 = 7$

a) $x = 12$

b) $x = 1$

- 22 from the histogram shown at the right answer the following questions .

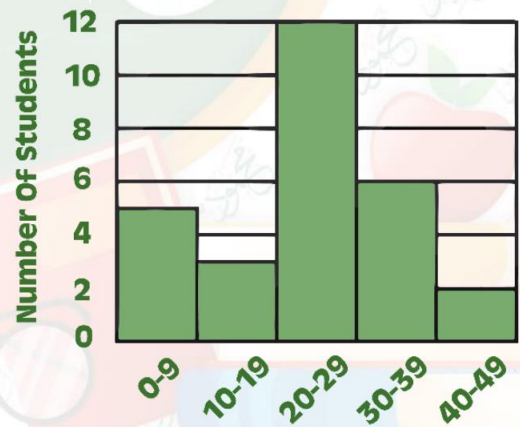
1. Which interval represents the most number of students?20-29....

2. Which interval has three students?10-19.....

3. How many students went to a pool at least 30 times last summer?8.....

4. How many students went to a pool less than ten times last summer?5.....

Number of visits to a pool
Last summer



Number Of visits

تم بحمد الله ،

بسم الله الرحمن الرحيم " إِنَّ الَّذِينَ آمَنُوا وَعَمِلُوا الصَّالِحَاتِ إِنَّا لَا نُضِيعُ أَجْرَ مَنْ أَحْسَنَ عَمَلًا " صدق الله العظيم

